

Air Emission Test Report

**HCl, NH₃ & Organic Compounds
(3/15/94)**

**Ash Grove Cement Company
3801 E. Marginal Way South
Seattle, WA 98134
(206) 623-5596**



627396

AGCS2M000076

S4000507

AVERAGE AIR EMISSION TEST RESULTS:

| Measured Parameter | Non-Blank Corrected Averages | | |
|---------------------------------|------------------------------|---------------|------------|
| | <milligrams/dscm> | <grains/dscf> | <lbs/hour> |
| Hydrogen Chloride: | 1.34 | 0.000585 | 0.45 |
| Ammonia:* | 7.85 | 0.003423 | 0.38 |
| Total Non-Methane Hydrocarbons: | 9.73 | 0.004240 | 3.62 |

* Note: Averages based upon the results of test runs one and two.

The results above have not been blank corrected and are based upon three test runs for HCl, two test runs for NH₃ and four test runs for Total Non-Methane Hydrocarbons. A process upset (plug) occurred during the third run of the method 26 HCl test. The NH₃ concentration measured during the third test run was an order of magnitude greater than that of the first two test runs. The average NH₃ lbs/hr based upon all three test runs is 2.63.

QUALITY ASSURANCE:

VALID RESULTS has developed and utilizes equipment preparation, field sampling, sample chain of custody and calibration data sheets designed to follow the quality assurance guidelines outlined in the Environmental Protection Agency document EPA-600/4-77-027b "Quality Assurance Handbook for Air Pollution Measurement Systems, Volume 3".

Tracy Prevo, the project manager, completed the EPA Air Pollution Training Institute (APTI) Course #SI:414 "Quality Assurance for Source Emission Measurements" in March of 1993. A copy of his certificate of completion for this course is included in appendix D of this report.

Calibration data sheets for the S-Type pitot tube, Type K stack thermocouple, Type K thermocouple readout and the two dry gas meters are contained in appendix E of this report.

All of the calculations in this report are made using the applicable equations as shown in the EPA 40CFR60 Appendix A. All calculations, including field data averages, relating to these air emission test results have been checked at least twice by Tracy Prevo. A final quality assurance review was performed, prior to final publication, by independent consultant Mr. John Jackson.

SOURCE OPERATIONS:

Plant operating personnel considered the source to be operating normally throughout the source test except for one episode during the third test run of the method 26 test on March 15, 1994. The episode consisted of a plug forming downstream of the rotary kiln and resulted in a high Ammonia and low Hydrogen Chloride concentration and emission rate for the third test run.